



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,192	01/11/2002	Thangaraj Veerappan	23452-144	6876
909	7590	06/09/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			SCHLAIFER, JONATHAN D	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/042,192	Applicant(s) VEERAPPAN ET AL.	
	Examiner Jonathan D. Schlaifer	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims.

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application 10/042,192, filed on 3/22/2005.
2. Claims 1-40 are pending in the case. Claims 1, 11, 21, and 31 are independent claims.
3. The rejections of claims 1-4, 6, 11-14, 16, 21-24, 26, 31-34, and 36 under 35 U.S.C. 102(e) are withdrawn as required by amendment.
4. The rejections of claims 5, 7-10, 15, 17-20, 25, 27-30, 35, and 37-40 under 35 U.S.C. 103(a) are withdrawn as required by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4, 6-14, 16-24, 26-34, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng et al. (USPN 6,252,671 B1—filing date 5/22/1998), hereinafter Peng, further in view of Watanabe et al. (USPN 6,104,381—filing date 12/27/1996), hereinafter Watanabe.**
6. **Regarding independent claim 1, Peng discloses a method for determining a language in which a document is created (Peng analyzes fonts and content in col. 3, line 45—col. 4, line 5 to analyze language) comprising the steps of: receiving at least one electronic document (Peng receives fonts, which are a type of language-specific document in col. 3, line 45—col. 4, line 5 to analyze language); evaluating at least a portion of the character**

string by comparing each of the characters in the portion of the character string to a plurality of predetermined candidate character sets to determine one or more matches between the plurality of predetermined candidate character sets and the characters in the portion of the character string (Peng identifies character set encoding in the font documents in col. 5, line 40-65); determining whether the one or more character sets that match the characters in the portion of the character string correspond to one or more supported languages (Peng identifies character set encoding and language in the font documents in col. 5, line 40-65), and d) identifying one or more supported languages in which the electronic document is created based on a determination that the one or more character sets that match the characters in the portion of the character string correspond to one or more supported languages (Peng identifies character set encoding and language in the font documents in col. 5, line 40-65). However, Peng fails to disclose that the document includes a character string, wherein characters in the character string are represented in at least one of a plurality of character sets correspond to an undermined language. However, Watanabe in col. 11, lines 15-45 discloses that documents of unknown languages are processed in strings. It would have been obvious to one of ordinary skill in the art at the time of the invention to process documents of unknown language in strings in order to streamline data processing of large amounts of data.

7. **Regarding dependent claim 2**, Peng discloses the step of c) determining includes determining that the one or more character set encoding identifies at least two potential languages in which the electronic document is created (Peng checks for several possible language matches in col. 5, line 40-65).

8. **Regarding dependent claim 3**, Peng discloses the step of comparing at least one group of characters in the portion of the character string to predetermined groups of characters (Peng compares the electronic document to predetermined groups of characters in col. 5, line 40-65).
9. **Regarding dependent claim 4**, Peng discloses the step of detecting at least one identification for the at least one group of characters (Peng checks for several possible language matches and makes an identification in col. 5, line 40-65).
10. **Regarding dependent claim 6**, Peng discloses that the at least one identification is a bit-flag (flags are used for identification in col. 5, lines 1-30).
11. **Regarding dependent claim 7**, Peng fails to disclose the step of logically ANDing the at least one identification. However, it was notoriously well known in the art at the time of the invention that when multiple results are produced by a process, they should be ANDed together so that they may be manipulated as a single unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to AND the identifications together so that they may be treated as a single unit.
12. **Regarding dependent claim 8**, Peng fails to disclose the step of logically ANDing the at least one identification is repeated until a single identification is determined. However, it was notoriously well known in the art at the time of the invention that when multiple results are produced by a process, they should be ANDed together repeatedly so that they may be manipulated as a single unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to AND the identifications together repeatedly so that they may be treated as a single unit.

13. **Regarding dependent claim 9**, Peng fails to disclose the step of indicating the supported language associated with the electronic document. However, Peng does determine such a language, and it was notoriously well known in the art at the time of the invention that indicating results to the user helps provide the user with useful feedback about the output of a program, so it would have been obvious to one of ordinary skill in the art at the time of the invention to indicate the language in order to provide the user with useful feedback about the output of the program.
14. **Regarding dependent claim 10**, The method of claim 9, further comprising the step of identifying a character set associated with the supported language indicated. However, Peng does operate with this information, and it was notoriously well known in the art at the time of the invention that indicating information involved in the operation of a program to the user helps provide the user with useful feedback about the output of a program, so it would have been obvious to one of ordinary skill in the art at the time of the invention to indicate the language in order to provide the user with useful feedback about the output of the program.
15. **Regarding independent claim 11**, it is a system for performing the method of claim 1 and it is rejected under similar rationale.
16. **Regarding dependent claim 12**, it is a system for performing the method of claim 2 and it is rejected under similar rationale.
17. **Regarding dependent claim 13**, it is a system for performing the method of claim 3 and it is rejected under similar rationale.

18. **Regarding dependent claim 14**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.
19. **Regarding dependent claim 16**, it is a system for performing the method of claim 6 and it is rejected under similar rationale.
20. **Regarding dependent claim 17**, it is a system for performing the method of claim 1 and it is rejected under similar rationale.
21. **Regarding dependent claim 18**, it is a system for performing the method of claim 2 and it is rejected under similar rationale.
22. **Regarding dependent claim 19**, it is a system for performing the method of claim 3 and it is rejected under similar rationale.
23. **Regarding dependent claim 20**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.
24. **Regarding independent claim 21**, it is a system for performing the method of claim 1 and it is rejected under similar rationale.
25. **Regarding dependent claim 22**, it is a system for performing the method of claim 2 and it is rejected under similar rationale.
26. **Regarding dependent claim 23**, it is a system for performing the method of claim 3 and it is rejected under similar rationale.
27. **Regarding dependent claim 24**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.
28. **Regarding dependent claim 26**, it is a system for performing the method of claim 6 and it is rejected under similar rationale.

29. **Regarding dependent claim 27**, it is a system for performing the method of claim 1 and it is rejected under similar rationale.
30. **Regarding dependent claim 28**, it is a system for performing the method of claim 2 and it is rejected under similar rationale.
31. **Regarding dependent claim 29**, it is a system for performing the method of claim 3 and it is rejected under similar rationale.
32. **Regarding dependent claim 30**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.
33. **Regarding independent claim 31**, it is a processor readable medium containing processor readable code for performing the method of claim 1 and it is rejected under similar rationale.
34. **Regarding dependent claim 32**, it is a processor readable medium containing processor readable code for performing the method of claim 2 and it is rejected under similar rationale.
35. **Regarding dependent claim 33**, it is a processor readable medium containing processor readable code for performing the method of claim 3 and it is rejected under similar rationale.
36. **Regarding dependent claim 34**, it is a processor readable medium containing processor readable code for performing the method of claim 4 and it is rejected under similar rationale.

37. **Regarding dependent claim 36**, it is a processor readable medium containing processor readable code for performing the method of claim 6 and it is rejected under similar rationale.
38. **Regarding dependent claim 37**, it is a processor readable medium containing processor readable code for performing the method of claim 1 and it is rejected under similar rationale.
39. **Regarding dependent claim 38**, it is a processor readable medium containing processor readable code for performing the method of claim 2 and it is rejected under similar rationale.
40. **Regarding dependent claim 39**, it is a processor readable medium containing processor readable code for performing the method of claim 3 and it is rejected under similar rationale.
41. **Regarding dependent claim 40**, it is a processor readable medium containing processor readable code for performing the method of claim 4 and it is rejected under similar rationale.
42. **Claims 5, 15, 25, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng, further in view of Watanabe, further in view of Schulze (USPN 6,167,369—filing date 11/23/1998).**
43. **Regarding dependent claim 5**, Peng and Watanabe fail to disclose that the at least one group of characters is an n-gram. However, Schulze discloses in the Abstract, lines 1-10 that n-grams may be used to facilitate probabilistic analysis of whether a language is predominant. It would have been obvious to one of ordinary skill in the art at the time of

the invention to use n-grams to facilitate probabilistic analysis of whether a language is predominant.

44. **Regarding dependent claim 15**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.

45. **Regarding dependent claim 25**, it is a system for performing the method of claim 4 and it is rejected under similar rationale.

46. **Regarding dependent claim 35**, it is a processor readable medium containing processor readable code for performing the method of claim 4 and it is rejected under similar rationale.

Response to Arguments

47. Applicant's arguments with respect to claims 1,11,21,31 have been considered but are moot in view of the new ground(s) of rejection.

48. Applicant's arguments filed 3/22/2005 have been fully considered but they are not persuasive.

49. With respect to the arguments regarding Claim 5, Schultze teaches background material regarding the utility of n-grams and the Examiner remains convinced that it is sufficient to sufficiently reject claim 5.

50. With respect to claims 2-10, 12-20, 22-30, and 32-40, the Applicant argues patentability based on the patentability of claims 1, 11, 21, and 31. As these latter independent claims must remain rejected, a patent cannot be granted on the dependent claims at this time.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,713,033 (filing date 1/3/1994)—Sado

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D. Schlaifer whose telephone number is (571) 272-4129. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS

William L Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
6/6/2005